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Active

- L1: (118) POS and pre-purchase\$
- L2: (35) 1 and (@ad<"20010516")
- L3: (424) pre-purchase\$ or pre-sell\$
- L4: (27410) (determin\$ near3 production) or incentive
- L5: (158) 3 and 4
- L6: (48) 5 and (@ad<"20010516")
- L7: (0) Forward citation search 1
- L8: (11948) (determin\$ near3 production)
- L9: (2) 3 and 8
- L10: (159) 3 and (@ad<"20010516")
- L14: (445) prepay\$ and reserv\$
- L15: (260) 14 and (@ad<"20010516")
- L16: (33) 15 and pos
- L17: (868) (prepay\$ or pre-purchase) and (guarante\$ or hold or reserve)
- L18: (473) 17 and (@ad<"20010516")
- L19: (63) 18 and pos
- L20: (32) 19 not 16
- L21: (36) (prepay\$ or pre-purchase) near5 (guarante\$ or hold or reserve)
- L22: (122) (prepay\$ or pre-purchase).ti.
- L23: (39) 22 and (@ad<"20010516")
- L24: (387) advanced near2 (purchase or sold)
- L25: (257) 24 and (@ad<"20010516")
- L26: (4) 25 and pos
- L27: (68) (prepay\$ or pre-purchase) and forecast
- L28: (37) 27 and (@ad<"20010516")

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Search notes
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	U	I	Document ID	Issue Date	Pages	Title	Current OR	Current XRef	Re
1	<input type="checkbox"/>	<input checked="" type="checkbox"/>	US 20020165788 A1	20021107	26	Systems and methods for operating vending machines	705/26		
2	<input type="checkbox"/>	<input checked="" type="checkbox"/>	US 20030200008 A1	20031023	73	LOYALTY REWARDS FOR CASH CUSTOMERS AT A FUEL	700/236	700/237	
3	<input type="checkbox"/>	<input checked="" type="checkbox"/>	US 20010020198 A1	20010906	73	Fuel dispensing system for cash customers	700/232	235/381; 705/14	
4	<input type="checkbox"/>	<input checked="" type="checkbox"/>	US 20010011225 A1	20010802	10	Internet subscription system for providing appointment	705/9	705/11	
5	<input type="checkbox"/>	<input checked="" type="checkbox"/>	US 20020029171 A1	20020307	17	Electronic quantity purchasing system	705/26		
6	<input type="checkbox"/>	<input checked="" type="checkbox"/>	US 20020004782 A1	20020110	14	System and method for prepaying for services or	705/39	705/26	
7	<input type="checkbox"/>	<input checked="" type="checkbox"/>	US 4731819 A	19880315	13	Prepayment product or service dispenser	379/145	109/52; 312/245;	
8	<input type="checkbox"/>	<input checked="" type="checkbox"/>	US 6446045 B1	20020903	68	Method for using computers to facilitate and control	705/26		
9	<input type="checkbox"/>	<input checked="" type="checkbox"/>	US 5926108 A	19990720	8	Movie information pager	340/7.21	340/7.48; 709/219	

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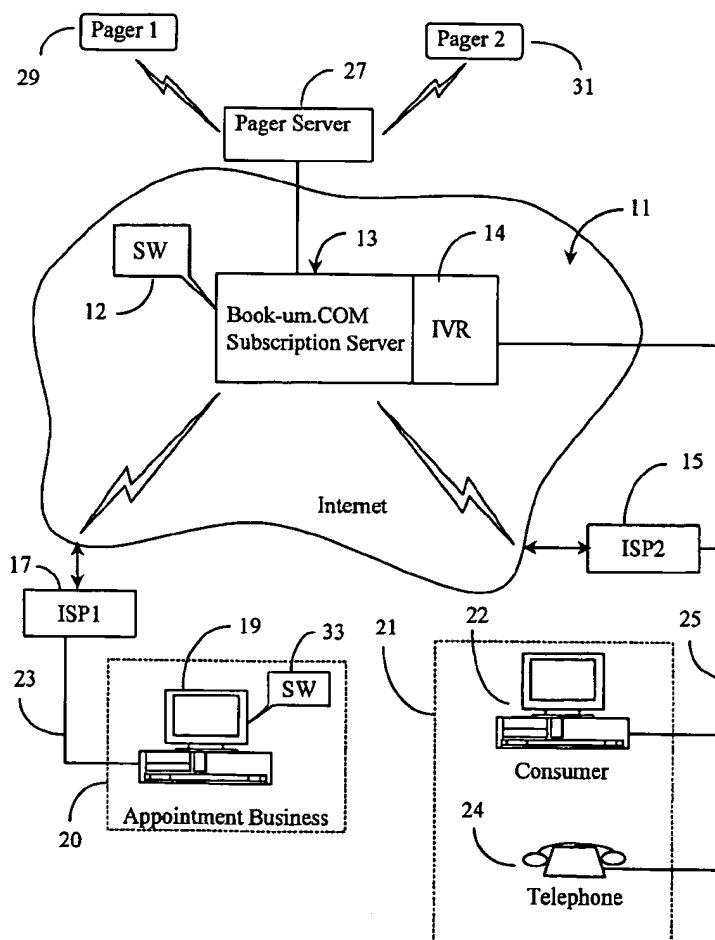
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US 20010011225A1

(19) **United States**(12) **Patent Application Publication**
O'Connor et al.(10) **Pub. No.: US 2001/0011225 A1**(43) **Pub. Date: Aug. 2, 2001**(54) **INTERNET SUBSCRIPTION SYSTEM FOR
PROVIDING APPOINTMENT
MANAGEMENT FOR SMALL BUSINESSES****Publication Classification**(51) **Int. Cl.⁷ G06F 17/60**(52) **U.S. Cl. 705/9; 705/11**(76) **Inventors: Patrick Thomas O'Connor, Prundale,
CA (US); Donald Rex Boys, Aromas,
CA (US)****Correspondence Address:**
CENTRAL COAST PATENT AGENCY
PO BOX 187
AROMAS, CA 95004 (US)(21) **Appl. No.: 09/814,010**(22) **Filed: Mar. 20, 2001****Related U.S. Application Data**(62) **Division of application No. 09/323,599, filed on Jun.
1, 1999.**(57) **ABSTRACT**

of the Disclosure An Internet-enabled appoint and reservation service system includes an Internet-connected appointment server executing a software suite, and one or more subscribing businesses to the service, the businesses having receiving apparatus enabling receipt of appointment schedules from the appointment server. The appointment server presents an interactive interface to browsing clients, the interactive interface enabling the clients to select the businesses and make an appointment or reservation with the businesses, and wherein the appointment server periodically provides updated appointment schedules to the subscribing businesses via the receiving apparatus. Subscribing businesses may operate with a personal computer connecting to the server. Businesses are grouped on the server into geographic groups and clients are enabled to select groups, then individual businesses, and then to accomplish appointments.



Detail Description Paragraph - DETX (19):

[0033] In some embodiments a client will be afforded a payment system whereby the client may enter a charge card or some other credit mechanism for payment, and the host of server 13 will handle at least some credit and payment tasks for the subscribing business, typically for a small fee per transaction. In some cases a prepayment may be required for special reservations or appointed services.



US 20020165788A1

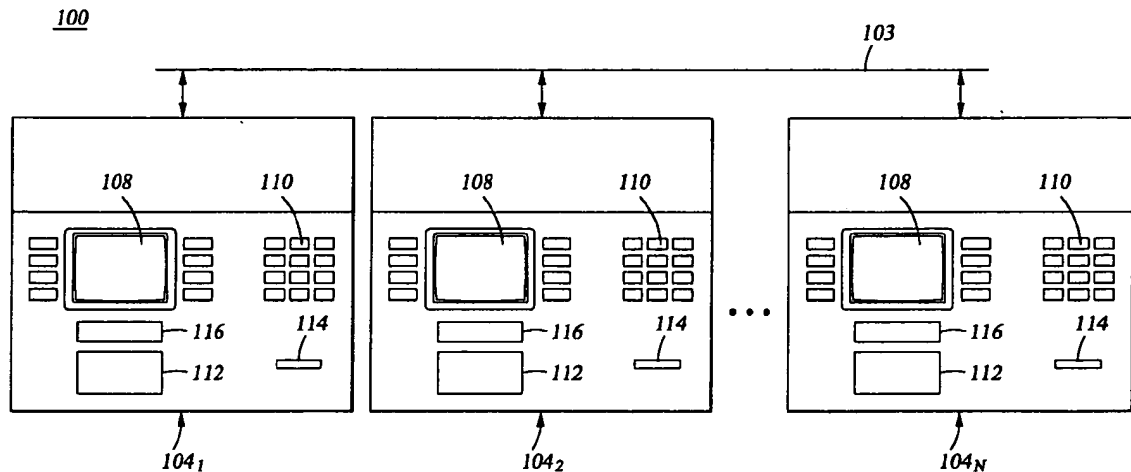
(19) **United States**(12) **Patent Application Publication** (10) Pub. No.: **US 2002/0165788 A1****Bates et al.**(43) Pub. Date: **Nov. 7, 2002**(54) **SYSTEMS AND METHODS FOR OPERATING VENDING MACHINES**

(52) U.S. Cl. 705/26

(75) Inventors: **Cary Lee Bates, Rochester, MN (US);
Mahdad Majd, Rochester, MN (US);
John Matthew Santosuosso, Rochester,
MN (US)**(57) **ABSTRACT**

Embodiments of the present invention provide for a method, system and article of manufacture for operating vending machines. In general, a plurality of vending machines are nodes of a network. Each node is configured to send, receive and process signals carrying inventory, pricing, reservation and/or refund information. In particular, a first signal is sent to one or more nodes requesting inventory/price information from other nodes. Those nodes carrying the product may reply with a second signal. In this manner, the location of vending machines carrying one or more items specified by a customer may be determined. In another embodiment, vending machine items may be reserved from a remote location. In still another embodiment, vending machines may be configured to provide refunds under controlled conditions. A consumer may request a refund in cases where the consumer was improperly charged for goods or services that were not provided.

Correspondence Address:

Gero G. McClellan**Thomason, Moser & Patterson, L.L.P.****Suite 1500****3040 Post Oak Boulevard****Houston, TX 77056-6582 (US)**(73) Assignee: **International Business Machines Corporation, Armonk, NY 10504**(21) Appl. No.: **09/848,573**(22) Filed: **May 3, 2001****Publication Classification**(51) Int. Cl.⁷ **G06F 17/60**

DOCUMENT-IDENTIFIER: US 20020165788 A1

TITLE: Systems and methods for operating vending machines

----- KWIC -----

Application Filing Date - APD (1):

20010503

Detail Description Paragraph - DETX (46):

[0080] In one embodiment, reserving an item and prepaying for the item may result in a discount for the consumer, since this guarantees a sale to the distributor regardless of whether the item is picked up or not. Other **incentive** plans and features may also be provided.

Detail Description Paragraph - DETX (48):

[0082] FIG. 14 illustrates one embodiment of the free money table 954. In general, the free money table 954 contains data used by a distributor to keep track of money the distributor makes without actually selling a product. An entry is added to this table for all non-refundable processing fees and all items that were **pre-purchased** and not picked up. Illustratively, the free money table 954 comprises a location ID entry 1402, an item ID entry 1404, a quantity entry 1406 and a price entry 1408. An entry 1410 is representative of other entries which may be included in other embodiments. The location ID entry 1402 contains the unique location identifier described with reference to the location ID entry 1002 of the product table 946. The item ID entry 1404 contains the unique item identifier (entry 1104 of the product table 948) that represents the item being reserved. The number of items that were not sold is contained in the quantity entry 1406. The corresponding price of the unsold items, or the non-refundable processing fee associated with the item, is contained in price entry 1408.

Detail Description Paragraph - DETX (60):

[0094] At step 1720, method 1700 determines if the item (and quantity) being requested is available. Thus, a reference to entry 1106 of the product table 948 is made using the specified items and location IDs. If the item is available, method 1700 proceeds to step 1725 to query whether the consumer has elected to **pre-purchase** the item. If so, the item is added to the reserved item table 950 at step 1730. At step 1731, a message is output to the message area 1690 to inform the consumer that the item has been reserved. In addition, the message may include a confirmation number (stored to the confirmation number entry 1220) which the consumer may use to pick up the item at a future time. The method 1700 then exits at step 1732.

Detail Description Paragraph - DETX (61):

[0095] If, at step 1725, the item was not **pre-purchased** then method 1700 proceeds to 1735 to get a non-refundable fee amount from the non-refundable



US006446045B1

(12) **United States Patent**
Stone et al.

(10) Patent No.: **US 6,446,045 B1**
(45) Date of Patent: **Sep. 3, 2002**

(54) **METHOD FOR USING COMPUTERS TO FACILITATE AND CONTROL THE CREATING OF A PLURALITY OF FUNCTIONS**

6,324,519 B1 * 11/2001 Eldering 705/14
2001/0011226 A1 * 8/2001 Greer et al. 705/14

FOREIGN PATENT DOCUMENTS

JP 408249426 A * 9/1996 G06F/17/24

OTHER PUBLICATIONS

"Groups set to unveil Web ad guidelines" Dec. 9, 1996, Advertising Age, vol. 67, No. 50, p. 1.*

"ABC formally launches Reader Profile Service as NAA unveils the NICC's silhouette" Aug. 2, 1999, NewsInc, vol. 11, NO. 1.*

Hamblen, Matt, "Shell protects brand via net" Jan. 10, 2000, Computerworld, vol. 34, No. 2, p. 39.*

* cited by examiner

Primary Examiner—Robert P. Olszewski

Assistant Examiner—Bryan Jaketic

(74) Attorney, Agent, or Firm—Henry Croskell, Esq.

(76) Inventors: **Lucinda Stone**, 6610 Regalbluff, Dallas, TX (US) 75240; **Michael A. Dean**, 6610 Regalbluff, Dallas, TX (US) 75240

(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.

(21) Appl. No.: **09/480,303**

(22) Filed: **Jan. 10, 2000**

(51) Int. Cl.⁷ **C06F 17/60**

(52) U.S. Cl. **705/26**

(58) Field of Search 705/14, 26, 27

(56) **References Cited**

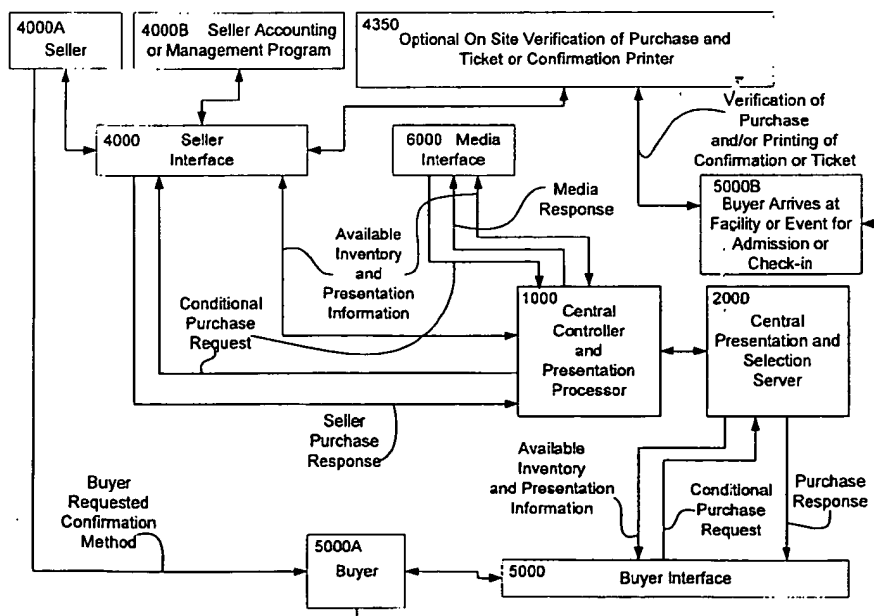
U.S. PATENT DOCUMENTS

5,193,056 A	3/1993	Boes	
5,581,461 A	12/1996	Coll et al.	
5,724,520 A	3/1998	Goheen	
5,794,207 A	8/1998	Walker et al.	
5,797,126 A	8/1998	Helbling et al.	
5,845,261 A	12/1998	McAbian	
5,878,141 A	3/1999	Daly et al.	
5,884,277 A	3/1999	Khosla	
5,893,076 A	4/1999	Hafner et al.	
5,946,646 A	8/1999	Schena	
6,026,371 A *	2/2000	Beck et al.	705/14
6,038,545 A *	3/2000	Mandeberg et al.	705/27
6,064,967 A *	5/2000	Speicher	705/14
6,119,101 A *	9/2000	Peckover	705/14

(57) **ABSTRACT**

The present invention is a method and apparatus that allows competing as well as complementing suppliers, vendors, service providers, purveyors, and other types of sellers internal inventory management as well as controlled design and publication of presentations for external near real-time interactive access to buyer-centered presentation, sales, distribution, and confirmation systems as well as other traditional media advertising and outreach. The Automated Media Presentation Generator including a Publication and Placement Control Engine, integrates a Distributed Sales and Inventory Control structure with Processing and Communications Resource Saver, and further provides a Reservation, Access, and Verification System replacing traditional ticket and confirmation methods.

23 Claims, 35 Drawing Sheets



US-PAT-NO: 6446045

DOCUMENT-IDENTIFIER: US 6446045 B1

TITLE: Method for using computers to facilitate and control the
creating of a plurality of functions

DATE-ISSUED: September 3, 2002

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Stone; Lucinda	Dallas	TX	75240	N/A
Dean; Michael A.	Dallas	TX	75240	N/A

US-CL-CURRENT: 705/26

ABSTRACT:

The present invention is a method and apparatus that allows competing as well as complementing suppliers, vendors, service providers, purveyors, and other types of sellers internal inventory management as well as controlled design and publication of presentations for external near real-time interactive access to buyer-centered presentation, sales, distribution, and confirmation systems as well as other traditional media advertising and outreach. The Automated Media Presentation Generator including a Publication and Placement Control Engine, integrates a Distributed Sales and Inventory Control structure with Processing and Communications Resource Saver, and further provides a Reservation, Access, and Verification System replacing traditional ticket and confirmation methods.

23 Claims, 35 Drawing figures

Exemplary Claim Number: 1

Number of Drawing Sheets: 35

----- KWIC -----

Application Filing Date - AD (1):

20000110

Detailed Description Text - DETX (290):

Presentation Generation Program: This component of the present invention relates to the creation and placement of presentations of commercial information with the purpose of informing buyers as to available products, goods, and services. The invention's purpose is to allow the seller the

ability to influence the buyer and induce said buyer to purchase those products, goods, and services while specifically allowing for the **advanced purchase** or reservation of those products, good, and services when appropriate.



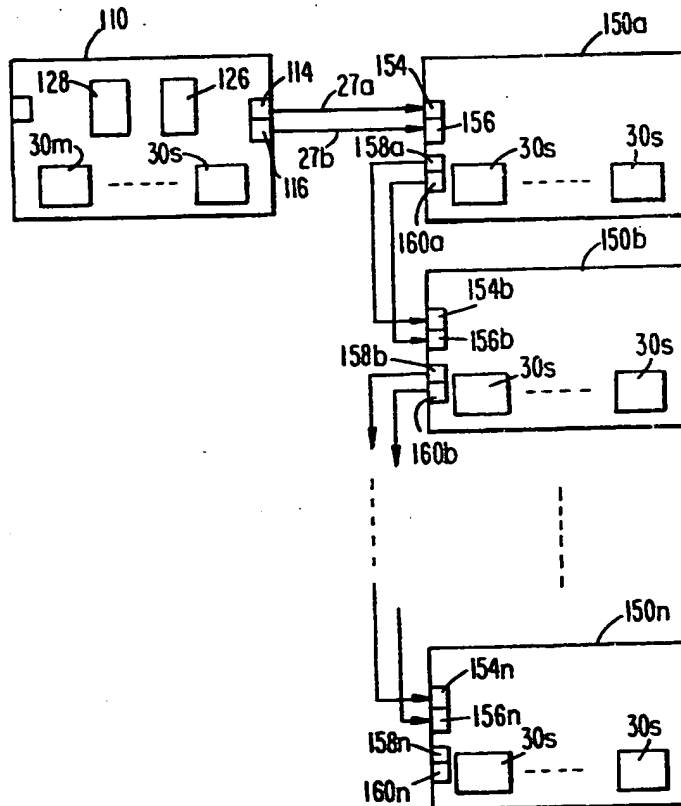
US005349477A

United States Patent [19][11] **Patent Number:** 5,349,477**Shuto**[45] **Date of Patent:** Sep. 20, 1994**[54] SYSTEM FOR RECORDING FROM LIVE SOURCE OR DUBBING TO MULTIPLE TAPES**[75] **Inventor:** Kenji Shuto, Tokyo, Japan[73] **Assignee:** Mothers System U.S.A., Inc., New York, N.Y.[21] **Appl. No.:** 904,077[22] **Filed:** Jun. 25, 1992[51] **Int. Cl.⁵** G11B 5/86[52] **U.S. Cl.** 360/15; 360/13; 369/84[58] **Field of Search** 360/15, 74.5, 74.6, 360/74.7, 13, 14.1, 14.2, 74.1; 369/1, 84**[56] References Cited****U.S. PATENT DOCUMENTS**

3,519,762	7/1970	Morris	360/15
3,767,206	10/1973	Rehklau et al.	360/15
4,122,500	10/1978	Bradford et al.	360/13
4,543,618	9/1985	Sato	360/15
4,628,370	12/1986	Fukuoka	360/15
4,792,867	12/1988	Komori	360/15
4,864,431	9/1989	Murase	360/15
5,117,317	5/1992	Suzuki	360/74.6
5,124,807	6/1992	Dunlap et al.	360/15

Primary Examiner—Edward P. Westin*Assistant Examiner*—Jon Santamauro*Attorney, Agent, or Firm*—Lowe, Price, LeBlanc & Becker**[57] ABSTRACT**

A system for making multiple duplicates of live program material or dubbing from a master cassette comprises a central control panel for operating a master deck and simultaneously controlling a plurality of slave decks. Operation of the system selectively in live performance recording and dubbing modes of operation is controlled from separate switches at the control panel while override circuitry prevents recording on the master if live performance recording and dubbing operation switches are operated simultaneously. Each deck includes a pivotable cassette lid and a pack switch responsive to the lid to control the corresponding deck independently of the others enabling recording from live programming to be staggered in time among multiple cassettes. During dubbing, when both the master and slave decks are to be operated, the master deck is delayed upon start-up for a duration sufficient to compensate for the nonrecordable leader portion of the slave cassette.

15 Claims, 8 Drawing Sheets

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Drafts
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 L1: (40) ticket near2 POS
 L2: (1) 1 and upsell
 L3: (1750) ticket near2 Purchase
 L4: (1) 2 and 3
 L6: (41) 5 and ticket
 L7: (1) ("5353219").PN.
 L8: (13) 3 and 5
 L5: (129) upsell
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1	<input type="checkbox"/>	<input checked="" type="checkbox"/>	US 20020047861 A1	20020425	42	Site information system and method	715/733		
2	<input type="checkbox"/>	<input checked="" type="checkbox"/>	US 20030130904 A1	20030710	28	Methods and apparatus for intelligent selection of	705/26		
3	<input type="checkbox"/>	<input checked="" type="checkbox"/>	US 6055513 A	20000425	33	Methods and apparatus for intelligent selection of	705/26	705/10; 705/14;	
4	<input type="checkbox"/>	<input checked="" type="checkbox"/>	US 6119099 A	20000912	35	Method and system for processing supplementary	705/16	705/10; 705/14;	



US006119099A

United States Patent [19][11] **Patent Number:** **6,119,099****Walker et al.**[45] **Date of Patent:** **Sep. 12, 2000****[54] METHOD AND SYSTEM FOR PROCESSING SUPPLEMENTARY PRODUCT SALES AT A POINT-OF-SALE TERMINAL****[75] Inventors:** Jay S. Walker, Ridgefield; James A. Jorasch, Stamford; Andrew S. Van Luchene, Norwalk, all of Conn.**[73] Assignee:** Walker Asset Management Limited Partnership, Stamford, Conn.**[21] Appl. No.:** 08/920,116**[22] Filed:** Aug. 26, 1997**Related U.S. Application Data****[63]** Continuation-in-part of application No. 08/882,709, Mar. 21, 1997.**[51] Int. Cl.⁷** **G06F 17/60****[52] U.S. Cl.** **705/16; 705/10; 705/14; 705/16; 705/17****[58] Field of Search** **705/10, 14, 16, 705/17, 20, 21, 39; 235/375, 376, 379, 380, 381; 345/156; 463/17, 18, 25; 340/825.35****[56] References Cited****U.S. PATENT DOCUMENTS**Re. 34,915 4/1995 Nichtberger et al. 705/14
3,573,747 4/1971 Adams et al. 705/37

(List continued on next page.)

FOREIGN PATENT DOCUMENTS512413 11/1992 European Pat. Off. G06K 17/00
5242363 9/1993 Japan G07K 1/12**OTHER PUBLICATIONS**

"Save The Mark", Financial Times, Feb. 1, 1983, Section I, p. 12.

Louise Cook, "Consumer Watch: Clip, Snip, Save", The Associated Press, Mar. 12, 1984, Business News Section.

Robert Kuttner, "Computer May Turn The World Into One Big Commodities Pit", Business Week, Sep. 11, 1989, Economic Viewpoint Section at p. 17.

Michael Schrage, "An Experiment in Economic Theory; Labs Testing Real Markets", The Record, Nov. 26, 1989, Business Section at p. B01.

"Let's Play the Cash Register Receipts Lottery", The New York Times, Dec. 25, 1990 Section 1 at p. 30.

Laura Del Rosso, "Market Says It Plans To Launch Air Fare Auction 'In June'", Travel Weekly, Apr. 29, 1991.

"Philips Offers Customers Financing Through Citicorp: Philips Medical Systems Northe America, Citicorp North America Inc.", Health Industry Today, Jun. 1991 vol. 54 at p. 4.

Jeff Pelling, "Travelers Bidding on Airline Tickets, SF Firm Offers Chance for Cut-rate Fares", The San Francisco Chronicle, Aug. 19, 1991, News Section at p. A4.

Laura Del Rosso, "Ticket-bidding Firm Close Its Doors; Marketel International", Travel Weekly, Mar. 12, 1992 vol. 51 at p. 1.

"Coupons Get Serious; Supermarkets Use Barcodes to Prevent Misredemptions", Chain Store Age Executive with Shopping Center Age, Oct., 1992, vol. 68 at p. 68.

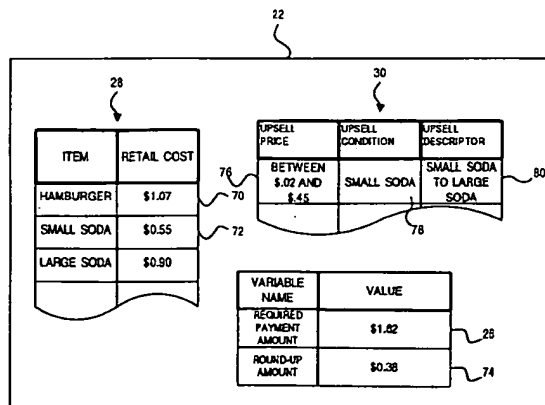
Phillip Fiorini, "No Place For Penny?"/ Smallest Coin Doesn't Make Cents to Some", USA Today, Jul. 29, 1994, News Section at p. 1A.

Alison Smith, "Survey of UK Consumer Credit and Asset Finance", Financial Times, Nov. 3, 1994 at p. VI.

(List continued on next page.)

Primary Examiner—Stephen R. Tkacs**Attorney, Agent, or Firm**—Dean Alderucci**[57]****ABSTRACT**

A POS terminal determines an upsell to offer in exchange for the change due to a customer in connection with a purchase. The point-of-sale terminal preferably maintains a database of at least one upsell price and a corresponding upsell to offer a customer in exchange for the change due to him. If the customer accepts the upsell, the cashier so indicates by pressing a selection button on the POS terminal. The required payment amount for the customer to pay is then set equal to the rounded price, rather than the purchase price. Thus, the customer receives the upsell in exchange for the coins due to him, and the coins need not be exchanged between the customer and the POS terminal.

182 Claims, 17 Drawing Sheets



US006055513A

United States Patent [19]

Katz et al.

[11] **Patent Number:** **6,055,513**[45] **Date of Patent:** **Apr. 25, 2000**

[54] **METHODS AND APPARATUS FOR INTELLIGENT SELECTION OF GOODS AND SERVICES IN TELEPHONIC AND ELECTRONIC COMMERCE**

[75] Inventors: **Ronald A. Katz**, Los Angeles, Calif.;
Gary L. West; **Thomas B. Barker**,
both of Omaha, Nebr.

[73] Assignee: **Telebuyer, LLC**, Los Angeles, Calif.

[21] Appl. No.: **09/038,399**

[22] Filed: **Mar. 11, 1998**

[51] Int. Cl.⁷ **G06F 17/60**

[52] U.S. Cl. **705/26; 705/27; 705/10;**
705/14

[58] Field of Search **705/10, 1, 26,**
705/27, 14

[56] **References Cited**

U.S. PATENT DOCUMENTS

4,792,968	12/1988	Katz	379/92.03
4,799,156	1/1989	Shavit et al.	705/26
4,825,045	4/1989	Humble	235/383

(List continued on next page.)

FOREIGN PATENT DOCUMENTS

WO94/21084	9/1994	WIPO	H04N 7/14
WO97/21183	6/1997	WIPO	G06F 151/00
WO 98/34189	8/1998	WIPO	G06F 17/60
WO 98/53406	11/1998	WIPO	G06F 15/163
WO98/58334	12/1998	WIPO	G06F 17/60
WO99/06914	2/1999	WIPO	G06F 13/00
WO99/13424	3/1999	WIPO	G06F 17/60

OTHER PUBLICATIONS

Middleton, T., "IT Stars in Video Chain's Rollout, Blockbuster Integrates Customer Data on Multiple Platforms", Jan. 30, 1995.

Peppers et al., "The One to One Future Building Relationships One Customer at a Time", © 1993, 1996, pp. 3-17; 40-43.

Alta Vista Alters its Vision of the Market, Abstract from Wall Street Journal (1996).

Amazon.com Website Printout dated Feb. 22, 1998.

Amazon.com Website Printout dated Feb. 24, 1998.

Amazon.com Website Printout dated Jul. 8, 1998.

Angiolillo, J. et al., "Personal Visual Communications Enters the Marketplace", AT&T Technology Products, Systems and Services, vol. 7, No. 3, pp 18-28, Fall, 1992.

Arbor Software Website Printouts dated Jun. 30, 1998.

(List continued on next page.)

Primary Examiner—Emanuel Todd Voeltz

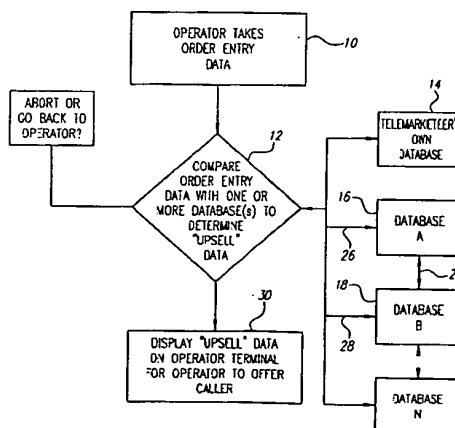
Assistant Examiner—George D. Morgan

Attorney, Agent, or Firm—Lyon & Lyon LLP

[57] **ABSTRACT**

Apparatus and methods are provided for effecting remote commerce, such as in telemarketing (either inbound or outbound) and in electronic commerce, which are particularly adapted for the intelligent selection and proffer of products, services or information to a user or customer. In one aspect of the invention, goods, service or information are provided to the user via electronic communication, such as through a telephone, videophone or other computer link, as determined by the steps of first, establishing communication via the electronic communications device between the user and the system to effect a primary transaction or primary interaction, second, obtaining data with respect to the primary transaction or primary interaction, including at least in part a determination of the identity of the user or prospective customer, third, obtaining at least a second data element relating to the user, fourth, utilizing the primary transaction or primary interaction data along with the at least second data element as factors in determining at least one good, service or item of information for prospective upsell to the user or prospective customer, and offering the item to the prospective customer. In the preferred embodiment, the selection of the proffer of goods, services or information comprises an upsell with respect to the primary transaction or primary interaction data. The offer of the upsell is preferably generated and offered in real time, that is, during the course of the communication initiated with the primary transaction or primary interaction.

267 Claims, 9 Drawing Sheets



METHOD AND SYSTEM FOR PROCESSING SUPPLEMENTARY PRODUCT SALES AT A POINT-OF-SALE TERMINAL

The present application is a continuation-in-part application of co-pending patent application Ser. No. 08/822,709, entitled SYSTEM AND METHOD FOR PERFORMING LOTTERY TICKET TRANSACTIONS UTILIZING POINT-OF-SALE TERMINALS, filed on Mar. 21, 1997, incorporated herein by reference.

FIELD OF THE INVENTION

The present invention relates to point-of-sale terminals, and, more specifically, to methods and systems for processing product sales at point-of-sale terminals.

BACKGROUND OF THE INVENTION

Most stores that are visited by customers have one or more point-of-sale ("POS") terminals, such as cash registers. Store cashiers use POS terminals for calculating the total price of a purchase (one or more products) and the amount of change due to a customer. Some POS terminals further track purchases made and adjust a database of store inventory accordingly.

The amount of change due is the difference between the purchase price and the amount tendered by the customer. Customers typically tender whole number cash amounts in the form of bills of paper money, while purchase prices are most often non-whole number amounts. Accordingly, the amount of change due to a customer at a POS terminal typically includes one or more coins, which the POS terminal or cashier dispenses to the customer.

Receiving and carrying change, especially coins, is an annoyance to many customers. Consequently, customers often are forced to tender non-whole number cash amounts in order to dispose of their unwanted coins and/or reduce the coins that would otherwise be given to them as change for their purchase. Coins and bills that are tendered by the customer are collected by the cashier at the POS terminal.

Both dispensing coins to and collecting coins from a customer increases the amount of time a cashier spends processing a purchase, and therefore increases the amount of time that customers wait in line at a POS terminal. Accordingly, businesses must pay wages for time spent handling coins, and customers must experience delays as coins are exchanged between cashiers and customers.

In addition, it is possible that the cashier will make a mathematical error and dispense the wrong amount of change. Customers often anticipate such an error and count their change to assure that they received the correct amount. Such customers typically count their change before leaving the POS terminal, further delaying other customers.

Businesses incur costs associated with counting, rolling, banking and otherwise handling coins. By some estimates, businesses expend hundreds of thousands of hours and hundreds of millions of dollars each year just to handle coins.

In summary, the exchange of change, especially coins, between customers and POS terminals is costly, time-consuming and undesirable. Unfortunately, conventional POS terminals merely calculate purchase prices and amounts of change due, and cannot reduce the amount of change due nor the exchange of coins.

Accordingly, it would be advantageous to provide a system and method that reduced the amount of change due,

and therefore reduced the coins exchanged between customers and cashiers at a POS terminal.

SUMMARY OF THE INVENTION

It is an object of the present invention to provide methods and systems for offering selected products in exchange for the amount of change due at POS terminals.

Generally, according to one aspect of the present invention, a POS terminal determines an upsell to exchange for the change due to a customer in connection with his purchase. The point-of-sale terminal preferably maintains a database of at least one upsell price and a corresponding upsell to offer a customer in exchange for the change due to him. The upsells and upsell prices are established so that upsells are profitably exchanged for the change due, thus providing the business with profit and the customer with value if the upsell is accepted.

When a customer brings a purchase to a POS terminal, the POS terminal generates the purchase price and sets a "required payment amount" to be equal to the purchase price. The required payment amount indicates the amount the customer is expected to pay. The POS terminal then generates a rounded price, preferably by rounding up the purchase price to a whole number, and calculates therefrom a round-up amount equal to the difference between the purchase price and the rounded price. Accordingly, the round-up amount indicates the coins due as change.

By comparing the calculated round-up amount with at least one of the upsell prices in the database, the POS terminal may determine whether the round-up amount corresponds to any of the upsell prices. If so, the POS terminal identifies the upsell corresponding to this upsell price, and outputs signals indicative of the identified upsell. The output signals are preferably displayed text or graphics that explain to the customer and/or the cashier that the upsell may be purchased for the specified amount of change due.

If the customer accepts the upsell, the cashier so indicates by pressing a selection button on the POS terminal. The required payment amount for the customer to pay is then set equal to the rounded price, rather than the purchase price. Thus, the customer receives the upsell in exchange for the coins due to him, and the coins need not be exchanged between the customer and the POS terminal.

BRIEF DESCRIPTION OF THE DRAWINGS

FIG. 1a is a schematic illustration of a POS terminal provided in accordance with the present invention.

FIG. 1b is a schematic illustration of another embodiment of the POS terminal of FIG. 1a.

FIG. 2 is a flow chart illustrating a method of the present invention for determining an upsell at a POS terminal.

FIG. 3 is an exemplary illustration of a storage area of the POS terminal of FIG. 1a.

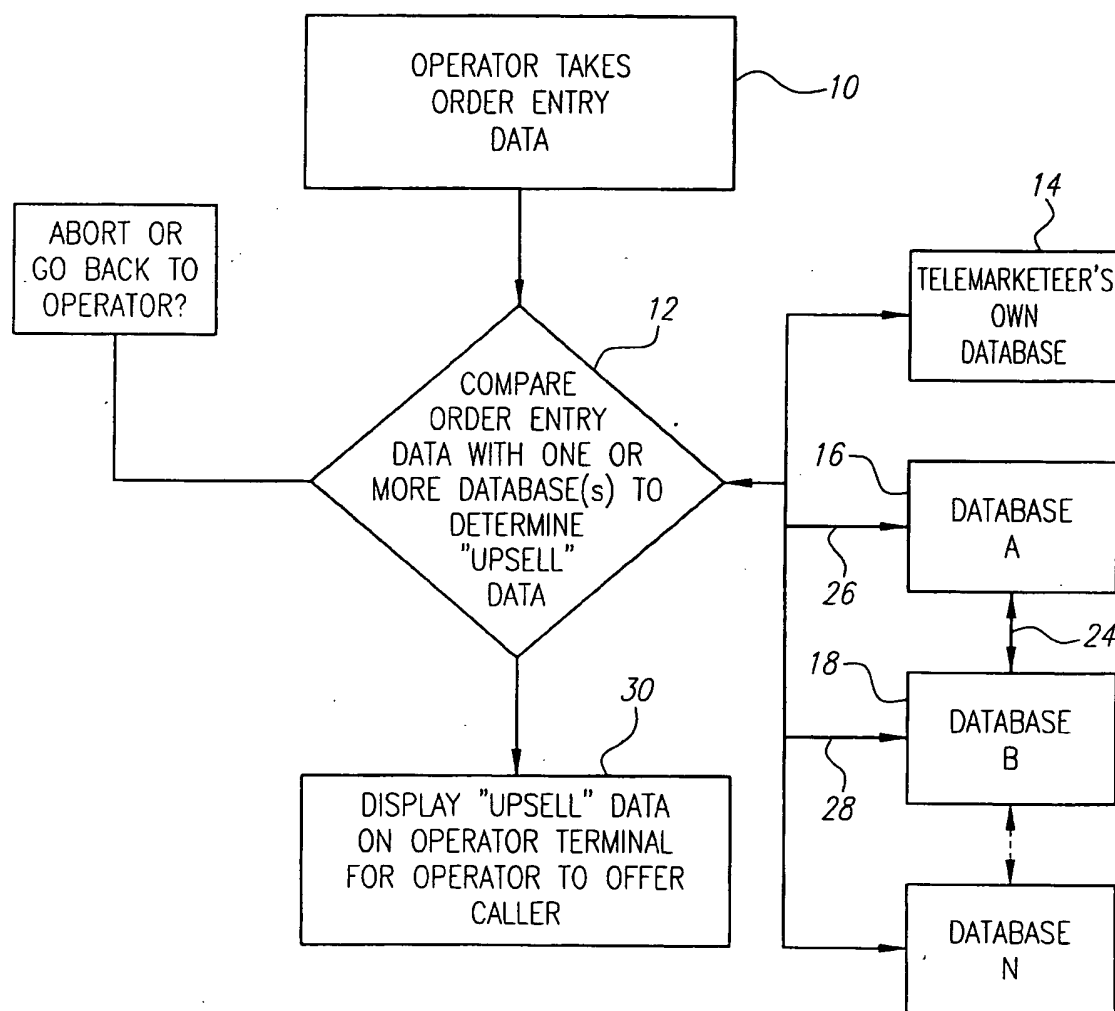
FIG. 4 is a schematic illustration of an upsell database of the POS terminal of FIG. 1a.

FIG. 5 is a schematic illustration of a customer database of the POS terminal of FIG. 1a.

FIG. 6 is a schematic illustration of an inventory price database of the POS terminal of FIG. 1a.

FIG. 7 is a schematic illustration of an offered price database of the POS terminal of FIG. 1a.

FIG. 8 is a flow chart illustrating a method of the present invention for evaluating a counter-offer for an upsell at a POS terminal.

*FIG. 1*

APPEAL CONFERENCE WORKSHEET

TC - 3600

SERIAL #: 09/992,811

DATE OF CONFERENCE : 02/ 28/ 05

EXAMINER : M. Cuff

ART UNIT : 3627

APPEAL CONFERENCE HELD ? ☒ YES ☐ NO

IF NO, ☐ REOPENED OR ☐ ALLOWED

CONFEREES : APPEAL CONFERENCE SPECIALIST : Tariq Hafiz
HOST SPE (OR SUBSTITUTE) : Bob Olszewski
OTHER (PRIMARY, SPE, TQAS, ect.) : Michael Cuff

CHECKLIST FOR PROPER EXAMINER'S ANSWER INPUT :

- ☒ Were all issues raised in the Brief considered during the conference?
- ☒ No Can an amendment be suggested that would obviously put the case in condition for allowance? (Without any additional consideration by the Examiner)
- ☒ Are all rejections proper and well founded ?
- ☐ Every limitation met and/or addressed ? *not agreed upon*
- ☒ Proper use of "Motivation to Combine" ?
- ☒ No suggestion of "Improper Hindsight" ?

CHECKLIST TO PREVENT REMANDS :

- ☒ All issues in the Brief properly appealable (not petitionable) ?
- ☒ Is the Appeal Brief in compliance with 37 CFR 1.192 (timely filed, fee paid, etc.) ?
- ☒ All foreign references have been translated ?
- ☒ All IDSs properly treated ?
- ☒ All after final amendments entered when approved for such by the Examiner?

RESULTS OF CONFERENCE :

DISPOSITION OF APPLICATION :

Sent to BPAI.	<input checked="" type="checkbox"/>
Prosecution Reopened.	<input type="checkbox"/>
Allowed - with amendment.	<input type="checkbox"/>
Allowed - without amendment.	<input type="checkbox"/>

NOTES : T. Hafiz believes that a teaching of the ability to pre-purchase items at a POS was not sufficient to show an obviousness combination with the Griner reference to read on claim 1. No one at the conference believed that the claims were allowable based on an anecdotal knowledge of children's recitals. B. Olszewski and M. Cuff believed that the case was strong enough to go to the board.